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| Philip Reilly | Abraham Lincoln’s DNA | Twenty-four true, wide-ranging tales of crime, history, human behavior, illness, and ethics, told from the personal perspective of the author, an eminent physician-lawyer who uses the stories to illustrate the principles of human genetics and to discuss the broader issues. |
| Stanley Fields | Genetic Twists of Fate | In Genetic Twists of Fate, distinguished geneticists Stanley Fields and Mark Johnston help us make sense of the genetic revolution that is upon us. Fields and Johnston tell real life stories that hinge on the inheritance of one tiny change rather than another in an individual's DNA: a mother wrongly accused of poisoning her young son when the true killer was a genetic disorder; the screen siren who could no longer remember her lines because of Alzheimer's disease; and the president who was treated with rat poison to prevent another heart attack. In an engaging and accessible style, Fields and Johnston explain what our personal DNA code is, how a few differences in its long list of DNA letters makes each of us unique, and how that code influences our appearance, our behavior, and our risk for such common diseases as diabetes or cancer. |
| Michael Crichton | Jurassic Park | An astonishing technique for recovering and cloning dinosaur DNA has been discovered. Now humankind’s most thrilling fantasies have come true. Creatures extinct for eons roam Jurassic Park with their awesome presence and profound mystery, and all the world can visit them—for a price. |
| Jodi Picoult | My Sister's Keeper | Anna is not sick, but she might as well be. By age thirteen, she has undergone countless surgeries, transfusions, and shots so that her older sister, Kate, can somehow fight the leukemia that has plagued her since childhood. The product of preimplantation genetic diagnosis, Anna was conceived as a bone marrow match for Kate—a life and a role that she has never challenged...until now. Like most teenagers, Anna is beginning to question who she truly is. But unlike most teenagers, she has always been defined in terms of her sister—and so Anna makes a decision that for most would be unthinkable, a decision that will tear her family apart and have perhaps fatal consequences for the sister she loves. My Sister’s Keeper examines what it means to be a good parent, a good sister, a good person. Is it morally correct to do whatever it takes to save a child’s life, even if that means infringing upon the rights of another? Is it worth trying to discover who you really are, if that quest makes you like yourself less? Should you follow your own heart, or let others lead you? Once again, in My Sister’s Keeper, Jodi Picoult tackles a controversial real-life subject with grace, wisdom, and sensitivity. |
| Richard Preston | Panic in Level 4 | Panic in Level 4 is a grand tour through the eerie and unforgettable universe of Richard Preston, filled with incredible characters and mysteries that refuse to leave one’s mind. Here are dramatic true stories from this acclaimed and award-winning author, including • the phenomenon of “self-cannibals,” who suffer from a rare genetic condition caused by one wrong letter in their DNA that forces them to compulsively chew their own flesh–and why everyone may have a touch of this disease • the search for the unknown host of Ebola virus, an organism hidden somewhere in African rain forests, where the disease finds its way into the human species, causing outbreaks of unparalleled horror • the brilliant Russian brothers–“one mathematician divided between two bodies”–who built a supercomputer in their apartment from mail-order parts in an attempt to find hidden order in the number pi (π) |
| Carl Zimmer | Parasite Rex |  |
| Marlene Zuk | Riddled with Life | From the earliest days of life on earth, disease has evolved alongside us. And its presence isn't just natural but is also essential to our health. Drawing on the latest research, Zuk answers a fascinating range of questions about disease: Why do men die younger than women? Why are we attracted to our mates? Why does the average male bird not have a penis? Why do we--as well as insects, birds, pigs, cows, goats, and even plants--get STDs? Why do we have sex at all, rather than simply splitting off copies of ourselves like certain geckos? And how is our obsession with cleanliness making us sicker? |
| Brenda Maddox | Rosalind Franklin; Dark Lady of DNA | In 1962, Maurice Wilkins, Francis Crick, and James Watson received the Nobel Prize, but it was Rosalind Franklin's data and photographs of DNA that led to their discovery. Brenda Maddox tells a powerful story of a remarkably single-minded, forthright, and tempestuous young woman who, at the age of fifteen, decided she was going to be a scientist, but who was airbrushed out of the greatest scientific discovery of the twentieth century. |
| Laurie Strongin | Saving Henry | Saving Henry is the eye-opening and inspiring story of how far a family will go to save the life of their child. Laurie Strongin's son Henry was born with a heart condition that was operable, but which proved to be a precursor for a rare, almost-always fatal illness: Fanconi anemia. Deciding to pursue every avenue that might provide a cure, Laurie and her husband signed on for a brand new procedure that combined in vitro fertilization with genetic testing to produce a baby without the disease, who could be a stem cell donor for Henry. As Laurie puts it: "I believe in love and science, nothing more and nothing less." |
| Philip M. Tierno | Secret Life of Germs | They're on everything we touch, eat, and breathe in -- on every inch of skin. And despite the advances of science, germs are challenging medicine in ways that were unimaginable ten years ago. No wonder the world is up in arms -- and using antibacterial soaps. From the common cold, E. coli, and Lyme disease to encephalitis, mad cow disease, and flesh-eating bacteria, Tierno takes readers on a historical survey of the microscopic world. Rebuffing scare tactics behind recent "germ events" Tierno explains how the recycling of matter is the key to life. Yes, he'll tell you why it's a good idea to clean children's toys, why those fluffy towels may not be so clean, and why you never want to buy a second-hand mattress, but he also reveals that there is a lot we can do to prevent germ-induced suffering. You'll never look at anything the same way again. |
| Micheal Crichton | The Andromeda Strain | Chilling tale about a US research satellite carrying a deadly extraterrestrial microscopic organism that crashes into a small town in Arizona. A group of top scientists are hurriedly assembled in a bid to identify and contain the lethal stowaway. |
| Richard Preston | The Demon in the Freezer | Peter Jahrling, the top scientist at Usamriid, a wry virologist who cut his teeth on Ebola, one of the world’s most lethal emerging viruses, has ORCON security clearance that gives him access to top secret information on bioweapons. His most urgent priority is to develop a drug that will take on smallpox-and win. Eradicated from the planet in 1979 in one of the great triumphs of modern science, the smallpox virus now resides, officially, in only two high-security freezers-at the Centers for Disease Control in Atlanta and in Siberia, at a Russian virology institute called Vector. But the demon in the freezer has been set loose. It is almost certain that illegal stocks are in the possession of hostile states, including Iraq and North Korea. Jahrling is haunted by the thought that biologists in secret labs are using genetic engineering to create a new superpox virus, a smallpox resistant to all vaccines. |
| James Watson | The Double Helix | A Personal Account of the Discovery of the Structure of DNA |
| T.D. Max | The Family that Couldn't Sleep | For two hundred years a noble Venetian family has suffered from an inherited disease that strikes their members in middle age, stealing their sleep, eating holes in their brains, and ending their lives in a matter of months. In Papua New Guinea, a primitive tribe is nearly obliterated by a sickness whose chief symptom is uncontrollable laughter. Across Europe, millions of sheep rub their fleeces raw before collapsing. In England, cows attack their owners in the milking parlors, while in the American West, thousands of deer starve to death in fields full of grass. What these strange conditions–including fatal familial insomnia, kuru, scrapie, and mad cow disease–share is their cause: prions. Prions are ordinary proteins that sometimes go wrong, resulting in neurological illnesses that are always fatal. Even more mysterious and frightening, prions are almost impossible to destroy because they are not alive and have no DNA–and the diseases they bring are now spreading around the world. |
| Steven Johnson | The Ghost Map |  |
| Richard Preston | The Hot Zone | A highly infectious, deadly virus from the central African rain forest suddenly appears in the suburbs of Washington, D.C. There is no cure. In a few days 90 percent of its victims are dead. A secret military SWAT team of soldiers and scientists is mobilized to stop the outbreak of this exotic "hot" virus. The Hot Zone tells this dramatic story, giving a hair-raising account of the appearance of rare and lethal viruses and their "crashes" into the human race. Shocking, frightening, and impossible to ignore, The Hot Zone proves that truth really is scarier than fiction. |
| Micheal West | The Immortal Cell | Once a devoted creationist eager to dispel theories of human evolution, Dr. West was set on a quest to find a scientific solution to the devastating effects of disease and death after the death of his father. He became immersed in the study of cell aging and the discovery of the cellular “clock” telomerase – the mechanism that controls cell aging. His work led him to found the biotechnology company Geron, a pioneer in the field of stem cell research. His new company, Advanced Cell Technology, is the only organization in the United States pursuing human therapeutic cloning research – research in the field of “regenerative medicine” intended to repair damaged and diseased human organs and tissues. Unlike reproductive cloning, the attempt to clone a human child, therapeutic cloning is a process of growing cells, using a patient’s own DNA that is inserted it into an unfertilized egg cell to create embryonic stem cells, cells that hold the promise of repairing the damage of age and disease – in essence, making the cell young again. The potential for therapeutic cloning to treat afflictions caused by the loss of dysfunction of cells – from spinal cord injury and skin burns to kidney failures and cancer – is enormous. Part memoir, part adventure story, The Immortal Cell chronicles the breakthroughs Dr. West and other scientists have made in biotechnology over the past decade – and the astonishing potential they offer us to cure diseases and improve the quality of human life. |
| Rebecca Skloot | The Immortal Life of Henrietta Lacks | Her name was Henrietta Lacks, but scientists know her as HeLa. She was a poor black tobacco farmer whose cells—taken without her knowledge in 1951—became one of the most important tools in medicine, vital for developing the polio vaccine, cloning, gene mapping, and more. Henrietta's cells have been bought and sold by the billions, yet she remains virtually unknown, and her family can't afford health insurance. This phenomenal New York Times bestseller tells a riveting story of the collision between ethics, race, and medicine; of scientific discovery and faith healing; and of a daughter consumed with questions about the mother she never knew. |
| Lewis Thomas | The Lives of a Cell |  |
| Barbara Strauch | The Primal Teen | For anyone who has ever puzzled over the mysterious and often infuriating behavior of a teenager comes a groundbreaking look at the teenage brain written by the medical science and health editor for The New York Times. While many members of the scientific community have long held that the growing pains of adolescence are primarily psychological, Barbara Strauch highlights the physical nature of the transformation, offering parents and educators a new perspective on erratic teenage behavior. Using plain language, Strauch draws upon the latest scientific discoveries to make the case that the changes the brain goes through during adolescence are as dramatic and crucial as those that take place in the first two years of life, and that teenagers are not entirely responsible for their sullen, rebellious, and moody ways. Featuring interviews with scientists, teenagers, parents, and teachers, The Primal Teen explores common challenges–why teens go from articulate and mature one day to morose and unreachable the next, why they engage in risky behavior–and offers practical strategies to help manage these formative and often difficult years. |
| David Epstein | The Sports Gene | For anyone who has ever puzzled over the mysterious and often infuriating behavior of a teenager comes a groundbreaking look at the teenage brain written by the medical science and health editor for The New York Times. While many members of the scientific community have long held that the growing pains of adolescence are primarily psychological, Barbara Strauch highlights the physical nature of the transformation, offering parents and educators a new perspective on erratic teenage behavior. Using plain language, Strauch draws upon the latest scientific discoveries to make the case that the changes the brain goes through during adolescence are as dramatic and crucial as those that take place in the first two years of life, and that teenagers are not entirely responsible for their sullen, rebellious, and moody ways. Featuring interviews with scientists, teenagers, parents, and teachers, The Primal Teen explores common challenges–why teens go from articulate and mature one day to morose and unreachable the next, why they engage in risky behavior–and offers practical strategies to help manage these formative and often difficult years. |
| Lisa Seachrist Chiu | When a Gene Makes You Smell Like a Fish | From the gene that causes people to age prematurely to the "bitter gene" that may spawn broccoli haters, this book explores a few of the more exotic locales on the human genome, highlighting some of the tragic and bizarre ways our bodies go wrong when genes fall prey to mutation and the curious ways in which genes have evolved for our survival. Lisa Seachrist Chiu has a smorgasbord of stories to tell about rare and not so rare genetic quirks. We read about the Dracula Gene, a mutation in zebra fish that causes blood cells to explode on contact with light, and suites of genes that also influence behavior and physical characteristics; the Tangier Island Gene, first discovered after physicians discovered a boy with orange tonsils (scientists now realize that the child's odd condition comes from an inability to process cholesterol); and Wilson's Disease, a gene defect that fails to clear copper from the body, which can trigger schizophrenia and other neurological symptoms, and can be fatal if left untreated. Friendlier mutations include the Myostatin gene, which allows muscles to become much larger than usual and enhances strength and the much-envied Cheeseburger Gene, which allows a lucky few to eat virtually anything they want and remain razor thin. |
| Howard Markel | When Germs Travel | The struggle against deadly microbes is endless. Diseases that have plagued human beings since ancient times still exist, new maladies like SARS make their way into the headlines, we are faced with vaccine shortages, and the threat of germ warfare has reemerged as a worldwide threat. In this riveting account, medical historian Howard Markel takes an eye-opening look at the fragility of the American public health system. He tells the distinctive stories of six epidemics–tuberculosis, bubonic plague, trachoma, typhus, cholera, and AIDS–to show how how our chief defense against diseases from other countries has been to attempt to deny entry to carriers. He explains why this approach never worked, and makes clear that it is useless in today’s world of bustling international travel and porous borders. |